**DETECTION AND IDENTIFICATION OF LIVING MODIFIED ORGANISMS-ZAMBIA**
Reference is made to notification 2017-141, dated 15 December 2017, inviting Parties to provide information regarding their capacity and needs in the detection and identification of living modified organisms. The information below indicates the list of laboratories and their specific activities.

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| **SERIAL NO.** | **NAME OF LABORATORY** | **SPECIFIC ACTIVITIES** | **CAPACITY** | **NEEDS** |
| 1 | Zambia Agricultural Research Institute(ZARI) | Biotechnology- Research, detection and identification of LMOs  | * Availability of equipment (Conventional PCR machines, ELIZA reader, PCR accessories, Gel documentation system, Biosafety cabinets).
* Human resource: competent technicians with different levels of expertise in Molecular and genetic engineering technics ranging from BSc to PhD.
 | * What we need is Real time PCR, NanoDrop for measuring quality of extracted DNA
* Reagents, need to synthesize primers.
* Exposure of personnel on new detection protocols especially on multiplex PCR for stacked genes.
* And also exposure on transformation events at specialised labs
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| 2 | National Scientific and Industrial Research(NISIR) | Biotechnology- Research, detection and identification of LMOs | * Detection of LMO’s using EU pcr protocols- qualitative pcr
 | * A real time PCR machine and training of users.
* Detect more GMO events apart from maize and soya.
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| 3 | Central Veterinary Research Institute | Biotechnology- Research, detection and identification of LMOs |  |  |
| 4 | University Teaching Hospital  | Biotechnology- Research, detection and identification of LMOs |  |  |
| 5 | Tropical Disease Research Institute | Biotechnology- Research, detection, identification and quantification of LMOs | * Microbiology laboratory
	+ Culture and Identification and of fungi, bacteria
* Parasitology laboratory that is capable of culturing and identification of cultures
* Vector biology laboratory
	+ Mosquito related studies
* Molecular Biology labs fitted with ordinary PCR machines and a real time thermal cyclers
* Gel documentation system for DNA detection
 | * Operation of Miseq Sequencing machine and interpretation of sequence results
* Training in Bioinformatics
* Need for a virology laboratory
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| 6 | Copperbelt University | Biotechnology- Research, detection and identification of LMOs |  |  |
| 7 | University Of Zambia | Biotechnology- Research, detection and identification of LMOs |  |  |
| 8 | Macha Research Trust | Biotechnology- Research, detection and identification of LMOs |  |  |
| 9 | Centre for Infectious Disease Research in Zambia(CIDARZ) | Biotechnology- Research, detection and identification of LMOs |  |  |